## HPS40 4+2 UNSHIELDED

Maximum Reliability at High Current Load and High Temperatures



# CONNECTION TECHNOLOGY FOR ALL ON-BOARD CHARGERS AVAILABLE ON THE MARKET

The HIRSCHMANN AUTOMOTIVE PowerStar 40 4+2 unshielded connection system is unshielded and sealed. It is designed for all high-voltage onboard chargers available on the market that are used in electric vehicles. Needless to say, the high-voltage connectors comply with the global standards of the automotive industry.

The products not only impress with their optimized design and low weight. Their operating flexibility is also hard to beat. As the smallest connection system available in this segment, it guarantees optimum performance and top processing.



#### Characteristics:

- compliant with several automotive test specifications
- watertight according to IP6K9K
- high current load at high ambient temperatures
- unshielded connector system
- compact design
- simple installation
- A wide variety of device connections can be implemented on request.

#### TECHNICAL PRODUCT INFORMATION

| CURRENT CLASS           | current class 1 and 2 connector  |
|-------------------------|--|
| APPLICATIONS            | 3-phase charging   |
| NUMBER OF PINS          | 4 (high voltage) + 2 (HVIL optional)   |
| OPERATING CONDITIONS    | 1,000 VDC  |
| VOLTAGE CLASS           | class B according ISO 6469-3:2011<br>60 VDC < U ≤ 1,000 VDC<br>25 VAC < Ueff ≤ 707 VAC (15-150 Hz) |
| AMBIENT CONDITION       | -40° C to +140° C  |
| MAXIMUM ALTITUDE        | 5,600 m  |
| MAXIMUM CURRENT LOAD    | 50 A at 80° C (4 x 6.0 mm <sup>2</sup> ), see deratings product specification                      |
| IP-DEGREE OF PROTECTION | IPXXB (unmated), IPXXD (mated)   |
| WATERTIGHTNESS          | IP6K9K, IPX8   |
| SHIELDED AREA           | unshielded   |
| VIBRATION STRENGTH 2    | according to LV214/215 - PG17 (without fixation point)   |
| VIBRATION STRENGTH 3    | according to LV214/215 - PG17 (first fixation point at < 200 mm)                                   |
| MATING/UNMATING FORCE   | < 75 N   |
| SECONDARY LOCK SYSTEM   | activating force < 40 N, no unintentional opening possible   |
| KOSHIRI SAFETY          | yes  |
| POLARIZATION/CODING     | incorrect insertion force > 225 N  |
| CPA SYSTEM              | operating force < 30 N   |
| HVIL SYSTEM             | minimum 1.0 mm (nominal 2.0 mm), leading   |

#### CONTACT SYSTEM INFORMATION

| CONTACT SYSTEM   | HCT4 (4.0 mm round terminal), Ag, crimped |
|------------------|---|
| MATERIAL/SURFACE | Cu-Leg., CuNiSi, Ag                       |
| CONNECTION       | crimped                                   |
| MATING CYCLES    | maximum 50 cycles                         |

### CUSTOMER-SPECIFIC INFORMATION

| CABLE CROSS SECTION     | 6.0mm <sup>2</sup> as MCC solution with different pole numbers |
|-------------------------|--|
| CONTACT CARRIER CODINGS | A  |

### HPS40 4+2 UNSHIELDED PRODUCT VARIANTS



Customer specific connection variants on request.

SEEKING MORE DETAILED INFORMATION? SCAN ME AND BROWSE THROUGH THE PRODUCT CATALOG.



## Daniel Engstler is your Contact for Individual Questions

Global Product Manager High Voltage



- 🖄 +43 664 780 464 73
- Ce daniel.engstler@hirschmann-automotive.com



www.hirschmann-automotive.com shop.hirschmann-automotive.com



3/2025 Subject to change. All rights reserved by Hirschmann Automotive GmbH.